

their systems.^{176/} The Commission should seriously question the viability of a new technology or service if its proponents are unable to cover all the costs associated with its implementation.

8. SCS Mobilecom, Inc.

SCS Mobilecom, Inc. (SCS) presents yet another self-serving "transition" proposal. SCS claims that its proposal will eliminate the need for a transition plan, since all microwave users will be able to co-exist with emerging technology services. According to SCS, if fixed microwave systems are converted to Broadband CDMA (B-CDMA), they could share spectrum with emerging technologies and other CDMA users.

As an initial matter, SCS virtually confirms that spectrum sharing between fixed microwave and B-CDMA systems is not a viable option. UTC had expressed early doubts as to whether wideband spread spectrum systems could share with fixed microwave on an overlay basis.

As to SCS's argument that co-existence is possible if fixed microwave systems also convert to B-CDMA, UTC would

^{176/} The Commission recently reported to the President that the net benefit of PCN is estimated at \$2-5 billion annually. Report of the Federal Communications Commission Regarding the President's Regulatory Reform Program (April 28, 1992), p. 14.

simply note that adoption of this proposal would require the Commission to specify in this docket the particular technologies that should occupy the "new spectrum reserve." The NPRM in this docket does not permit the identification of any particular emerging technologies or services, and certainly would not permit the Commission to order the modification of fixed microwave systems to B-CDMA or any other technology. SCS's suggestions are therefore inappropriate for this docket.

8. Tel/Logic

Tel/Logic, a PCS proponent, argues that the Commission should set individual transition periods reflecting the estimated remaining equipment life of 2 GHz microwave systems, but not more than 15 years from the date of the original facility installation or, if documented, from the date of the last major equipment upgrade.^{177/} Tel/Logic also proposes shorter transition periods for microwave operations in urban areas, and for microwave systems operated by licensees using the 2 GHz band for emerging technologies. Tel/Logic supports market-based negotiations, and mandatory arbitration for inresolvable negotiation disputes.

^{177/} Tel/Logic, p. 10.

With 29,000 microwave stations in the 2 GHz band, it is doubtful whether the Commission would be in a position to estimate the remaining useful life of each station in the band. To this extent, Tel/Logic's proposal is impractical.

As for its suggestion of a shorter transition period for urban systems, Tel/Logic reveals the classic "new technology artful dodge," by which it agrees that microwave users are entitled to reimbursement of relocation costs so long as those users are: (1) in another part of the country, or (2) restricted to demanding reimbursement only during the period prior to the implementation of new technologies.

10. Telocator

Although Telocator purports to represent the interests of new technology proponents and as well as existing microwave users, its microwave constituents are predominantly common carriers using the 2110-2130 and 2160-2180 MHz bands. Not surprisingly, Telocator argues that these systems should be given special consideration, and that PCS development should occur in the 1850-1990 MHz band (which is not used by Telocator's constituents).^{178/} Thus, Telocator's Comments do not represent the views of

^{178/} Telocator, pp. 13-14.

the vast majority of 2 GHz microwave licensees, let alone the views of the licensees of the 22,000 private microwave facilities in the 2 GHz band.

Telocator argues that existing microwave users should have an appropriate transition period measured from the time a new technology licensee seeks reaccommodation. This would involve a "sliding" transition plan whereby an existing 2 GHz user would have the right to continue operating on a primary basis until a new technology licensee demonstrates that technically suitable alternatives exist, and the new technology licensee agrees to compensate the microwave licensee for its relocation costs.^{179/} Telocator proposes that disputes should be submitted to mediation at the losing party's expense, and that the FCC should be the final arbiter of unresolved controversies or fairness.

Telocator's proposal for a "sliding" transition period makes more sense than a unified transition period that commences, for example, with the adoption of rules in this docket. As noted throughout these Reply Comments, it would be entirely arbitrary for the FCC to establish a single cut-off date for fixed microwave systems since the Commission proposes to introduce new technologies into the

^{179/} Telocator, pp. 6, 8.

band on a phased basis, and since it is unclear where or when new technologies will be deployed.

UTC also supports Telocator's proposal for indefinite primary status for incumbent microwave systems. However, UTC disagrees with Telocator's request for mediation. A preferable arrangement would be to have any disputes resolved by an Administrative Law Judge so that there can be some consistency in these matters, and to maintain Commission oversight of relocation disputes.

11. Time Warner Telecommunications, Inc.

Time Warner Telecommunications, Inc. (TWT), a PCS proponent, proposes two alternatives for a microwave transition. The first alternative involves the adoption of a fixed transition period of 10 years or less, during which parties could voluntarily negotiate and at the end of which all remaining fixed microwave facilities would be relegated to secondary status. The second alternative would grandfather fixed microwave stations indefinitely, or until a PCS provider offers a plan that will accommodate the microwave user and offer appropriate reimbursement of relocation costs.^{180/} According to TWT, under this second alternative there is no need to accord permanent "co-primary" status to any microwave users because any users

^{180/} TWT, pp.14-16.

that are asked to move will receive just and reasonable compensation, even if the relocation occurs many years after PCS services are introduced. TWT proposes that compensation should be "initially decided" by mutual agreement between the parties, but the FCC should ensure that microwave users are not permitted to recover "windfall profits."

TWT's "alternatives" are actually components of the relocation program outlined in UTC's Comments; namely, a fixed period (such as 15 years) during which incumbent users and new technology licensees could voluntarily negotiate, and an involuntary relocation procedure, commencing at the end of the voluntary negotiation period, involving full reimbursement of expenses for relocating to suitable replacement facilities. Under UTC's proposal, microwave users would have adequate "incentive" to negotiate during the voluntary negotiation period, but would not be forced to accept less than satisfactory replacement facilities merely to beat an arbitrary time-clock. Likewise, delayed implementation of an involuntary migration program would avoid the need for immediate Commission intervention and give the marketplace an opportunity to function.

12. U S West, Inc.

US West argues that different transition timing rules should apply to urban and non-urban areas. According to US West, microwave users have the option of relocating to fiber in urban areas, and because PCS is likely to develop in urban areas first, the urban transition period should be limited to 5-8 years, with 10-15 years permitted in rural areas.^{181/} US West also proposes reserving a portion of the 2 GHz band, on a temporary basis, for low-cost relocation of some microwave systems, with eventual phase-out of this relocation band.^{182/} The carrier supports market-based negotiations, including the ability of new technology licensees to "partner" with incumbent microwave users "for the remaining life of the existing operator's license or the end of the Commission-prescribed transition period, whichever is longer."^{183/} If market-based solutions fail, US West recommends use of alternative dispute resolution procedures.

While UTC agrees that there will likely be timing differences between regions of the country or even within bands of spectrum with respect to the need for fixed

^{181/} US West, pp. 6, 9-10.

^{182/} US West, p. 11.

^{183/} US West, p. 12.

microwave systems to relocate, the Commission cannot propose a generic urban/rural dichotomy until it knows what technologies will be deployed, where they will be deployed, and when.

As to the availability of fiber in urban areas, US West offers little evidence that fiber optic facilities actually would be available to replace all urban 2 GHz microwave systems. In any event, and as previously discussed, installation of fiber optic facilities -- particularly in urban areas -- is extremely expensive compared with fixed microwave. To the extent fiber optic service is available from local exchange carriers or competitive access providers, private microwave users should not be forced to accept service from a third-party where the user would lack complete control of the communications system. Electric, gas and water utilities install private microwave systems in order to maintain end-to-end control of their communications channels. To require these users to take service from third-party service providers would reverse over 30 years of Commission policy supporting the availability of alternatives to the public network.

Finally, UTC supports US West's call for market-based negotiations, but does not agree with its characterization

of the proposal as constituting "market-based negotiations." US West would permit "market-based" negotiations, provided (1) incumbent users are not permitted to joint-venture with new technology users beyond a certain period; and (2) any payments are limited to cost, plus a "premium payment" if the microwave user agrees to early relocation. It is fundamental that in a free market parties are not limited in the amount or type of consideration exchanged. UTC therefore opposes US West's form of "market-based negotiations."

UTC also questions the viability of creating temporary havens in the 2 GHz band for microwave relocations. Under this approach, microwave users could be subjected to the inconvenience of multiple relocations. Further, if the final (and more expensive) relocation occurs after the transition period, as proposed by US West, the microwave user will be forced to cover the most expensive change-out with no right to reimbursement.

C. UTC's Recommended Transition Plan

After reviewing the proposals of other commenters, UTC remains convinced that if the Commission proceeds with the introduction of new technologies in the 2 GHz band, the

following elements, at a minimum, must be incorporated into any such plan:

1. Adequate replacement spectrum, with suitable technical characteristics, must first be identified and made available for relocated 2 GHz microwave systems and for new private microwave systems that would have been proposed for this band.
2. Incumbent users of the 2 GHz band must be afforded indefinite primary status, and the FCC should continue to authorize new 2 GHz microwave paths on a primary basis.
3. New technology licensees should be granted access to the 2 GHz band only pursuant to license, and only on a secondary, non-interference basis to incumbent fixed microwave operations during at least the initial five-year license term, with the potential for upgrading to "co-primary" status upon demonstration there are no unresolved interference complaints. Unlicensed radio services should not be authorized on any frequencies for which there are outstanding fixed microwave licenses.
4. Free market negotiations should be permitted between incumbent microwave users and new technology licensees concerning relocation to alternative frequency bands or non-spectrum dependent media.
5. If necessary, the FCC could adopt an involuntary relocation procedure, designed to take effect 15 years after the adoption of a specific allocation to an emerging technology, that would provide as follows:
 - a. A new user may request involuntary modification of an existing user's license to specify operations on different frequencies (but not alternative media);
 - b. The new user is responsible for all relocation costs, and must establish an escrow account or buy a performance bond to guarantee all relocation costs,

including any ongoing incremental expenses related to the transition to new frequencies;

- c. The proposed system must provide quality and reliability equal to or superior than the existing system;
- d. The existing user must have the opportunity to oppose the relocation proposal or to submit a counterproposal; and
- e. If the replacement facilities prove to be unsatisfactory in practice, the existing user must be relocated back to its original facilities at the new user's expense.

Adoption of anything less would confirm the Commission's action in this docket as an arbitrary clearing of the 2 GHz band without due consideration of the proven needs of the incumbent 2 GHz microwave users.

IV. Private Use of Emerging Technology Bands

It must be pointed out that UTC does not oppose the development of emerging technologies; rather, it is the Commission's methodology that UTC opposes. UTC firmly believes that the development of emerging technologies is a worthy goal. Moreover, UTC sees a strong need for additional private land mobile radio spectrum for advanced technologies to meet the needs of the utility

industry.^{184/} However, UTC fears that in the Commission's rush to implement these new technologies the FCC is not considering the full impact of its proposals on the existing users of the 2 GHz band and the public which they serve.

However, all of the above objections notwithstanding, it is UTC's position that irrespective of the band ultimately selected for the development of emerging technologies, the Commission must ensure that private system operators will be able to develop proprietary communications networks using these emerging technologies. The example of the Commission's division of the 800/900 MHz band into allocations for both cellular and private land mobile radio, as well as its decision to allocate the 220-222 MHz band for "commercial" and "non-commercial" operations, should be followed with regard to any new land mobile allocations for emerging technologies.

^{184/} To clarify Motorola's Comments at p. 7, UTC's Reply Comments in PR Docket 91-170 did not recognize that additional spectrum in the "1-3 GHz range" is required to accommodate the private land mobile community's needs. Instead, UTC suggested that additional private land mobile radio spectrum could come from either underutilized television broadcast spectrum, or the 2.5-2.69 GHz wireless cable band.

V. Conclusion

UTC continues to view the Commission's spectrum reserve concept as a misguided effort to clear the 2 GHz band for unknown, future technologies. The FCC is simply unable to make a rational assessment of the public interest benefits to be obtained from unknown future services that would warrant a forced relocation of existing users from the band.

A fundamental flaw in the spectrum reserve concept is its lack of specificity regarding the new technologies to be implemented in the reserve. Prior to initiating a rulemaking the Commission should have instituted a "Notice of Inquiry" requesting information on emerging technologies with anticipated spectrum requirements, and on the possible bands to be used to identify them.

The NPRM and the OET Study are result driven, and do not represent objective cost/benefit analyses of reallocating spectrum for new technologies. UTC firmly believes that none of the factors enumerated by the FCC in guiding its band selection, either separately or in combination, prohibit the Commission's serious consideration of alternates to the 2 GHz band for a spectrum reserve. Under an objective analysis, the FCC would have targeted other bands where the operational,

societal, and financial impact of a reallocation would be less severe.

In addition to its failure to adequately consider alternative bands for the spectrum reserve, there are a host of deficiencies and flaws in the OET's analysis concerning the feasibility of relocating existing 2 GHz users to higher microwave bands. Moreover, UTC deems the NPRM's relocation proposals, such as a migration to the microwave bands above 3 GHz or a conversion to fiber optics, to be wholly inadequate to accommodate the needs of existing 2 GHz microwave users.

The Commission's proposed transition plan is unworkable. While the Commission's proposal for co-primary band sharing implies good-faith compromise and accommodation, the reality is that there is little in the way of hard, empirical evidence to suggest that new technologies can be introduced on a non-interference basis to fixed microwave systems. Moreover, as a practical matter co-primary status is meaningless without a specification of the interference criteria for band sharing, which is presently impossible absent an identification of the new technologies that will be permitted to share the band. UTC therefore urges the Commission to clarify co-primary status by proposing

specific interference standards, or to clarify the interference protection rights of fixed microwave users by allowing new technologies to share these bands only on a secondary, non-interference basis.

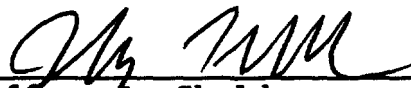
Free market negotiations between licensed 2 GHz microwave users and new technology service providers should be permitted concerning reimbursement of relocation costs. However, UTC reiterates that a crucial element regarding the equities of such an arrangement is that all 2 GHz microwave users must be licensed indefinitely on a primary basis. Moreover, because unlicensed radio services would be incompatible with a market-based relocation plan, such use should not be allowed in the 2 GHz band.


WHEREFORE, THE PREMISES CONSIDERED, the Utilities Telecommunications Council, respectfully urges the

Commission to terminate this proceeding or to otherwise
take action consistent with the views expressed herein.

Respectfully submitted,

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